

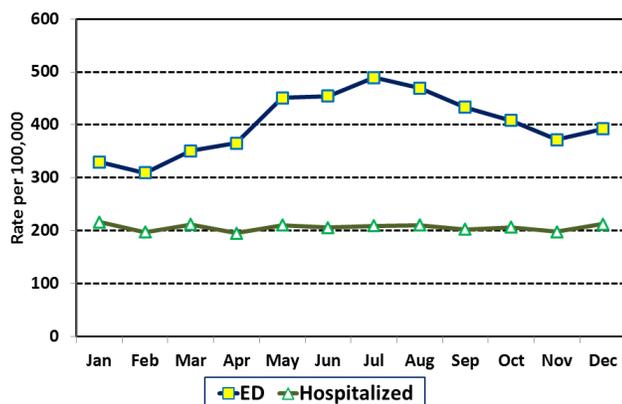
**Falling: inadvertently coming to rest on the ground, floor or other level lower than intended.<sup>4</sup>**

## Minnesota Data

Falls were the #1 cause of unintentional injury death in 2009, and have exceeded motor vehicle accidents since 2007.<sup>1</sup>

- MN had the 5<sup>th</sup> highest fall death rate in the US at 14.03/100,000; nearly two times the US rate of 8.08. Both continue to rise.<sup>1</sup>
- Adults age 65 and older accounted for more than 86% of MN fall deaths with a rate of 95.22/100,000, compared to the US rate of 51.61.<sup>1</sup>
- Older adults in Minnesota experienced over 29,900 falls in 2009, causing 639 fatalities and an estimated medical cost of \$255,435,200.<sup>2,3</sup>
- MN falls have no apparent seasonal pattern.<sup>2</sup>

**Nonfatal Hospital-treated Unintentional Fall Rate by Month, Ages 65+, Minnesota 2002-2011<sup>2</sup>**

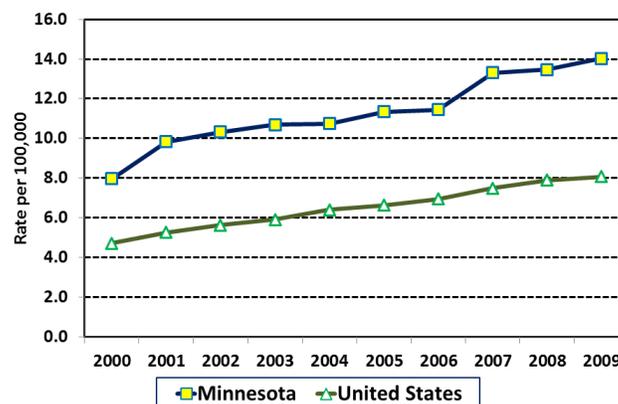


## US National Data

Falls are the leading cause of traumatic brain injuries (TBI), fractures, emergency visits, and hospital admissions for trauma.<sup>5</sup>

- Adults age 75 and older have the highest rates of TBI related hospitalization and death.<sup>6</sup>
- About 78% of fall deaths, and 79% of medical costs were due to TBIs and lower extremity injuries.<sup>7</sup>
- The fall death & injury rates continue to rise, increasing costs of health care and impacting quality of life.<sup>3,7</sup>
- More than one third of adults aged 65+, fall each year.<sup>4</sup>
- Less than half of people who fall inform their health care provider about it.<sup>4</sup>
- Over 82% of fall deaths occurred in adults 65 and older. People age 85+ were injured by falls four times as often as adults age 65-74 (2009).<sup>1</sup>

**Unintentional Fall Death Rates, United States and Minnesota 2000-2009, All Ages<sup>1</sup>**



Falls are the leading cause of injury and hospital trauma admissions. In 2009, 2.2 million older adults were treated in emergency departments and more than 581,000 hospitalized.<sup>1</sup>

- Recurrent falls are more likely to occur among individuals who are female, of increased age, are nonwhite, are in fair or poor health, have increased limitations in Activities of Daily Living, and/or have multiple comorbidities.<sup>4</sup>
- Forty percent of hospital admissions in older adults were due to fall-related injuries.<sup>4</sup>
- Women who fall are more likely to become injured, while men who fall are more likely to die.<sup>9</sup>

## Cost

- By 2020, the annual direct and indirect cost of fall injuries is expected to reach \$54.9 billion (in 2007 dollars).<sup>4</sup>
- Fall injury cost increases rapidly with age.<sup>7</sup>
- Fractures account for over one-third of nonfatal injuries, and 61% of costs or \$12 billion.<sup>7</sup>
- US cost of fatal fall injuries totaled \$349 million (2005): \$160 million for men and \$189 million for women. Costs were similar for men and women until age 85, when the costs for women (\$105 million) exceeded that of men (\$62 million).<sup>7</sup>
- Up to 25% of adults living independently prior to a hip fracture require a nursing home stay of at least one year after their fracture.<sup>8</sup>
- Individuals who fall at age 75 and older are 4-5 times more likely to be admitted to long term care facilities for a year or more compared to those who fall at age 65 to 74.<sup>4</sup>
- Over 90% of hip fractures are caused by falls.
- In 2007, there were 264,000 hip fractures. Women had almost three times the fracture rate compared to men.<sup>9</sup>
- About 78% of fall deaths, and 79% of total costs were due to traumatic brain injuries (TBI) and injuries to the lower extremities.<sup>7</sup>



## Factors That Increase Risk of Falling

- History of falls: two falls or one fall with injury in the past 12 months.
- Fear of falling
- Mobility problems due to impaired balance, muscle weakness, or chronic health conditions such as arthritis, diabetes or stroke
- Complications of chronic health conditions such as vision changes or loss of sensation in feet
- Poor nutritional status
- Medication side effects and/or interactions
- Alcohol use
- Home and environmental hazards such as (clutter, poor lighting, loose carpet, lack of railings on stairs, etc.)
- Incorrect size, type, or use of assistive devices (walkers, canes, crutches, etc.)
- Poorly designed public spaces<sup>10</sup>

## Preventing Falls & Fall injuries

Many conditions considered to be a result of aging are actually caused by inactivity. Increasing physical activity among mid-life and older adults is a key strategy to preventing falls.<sup>11, 12, 13</sup>

Effective strategies to reduce falls:

- Screen adults age 65+ and those at high risk for falls.
- Educate consumers about how to modify fall risk factors.
- Perform progressive balance & lower body strengthening exercises (at least 150 minutes per week).
- Review medications for increased risk and opportunities to decrease risk of falls.
- Manage on-going health conditions such as heart disease, diabetes, arthritis, osteoporosis, stroke, and depression to minimize risks associated with limited mobility, medication and pain.
- Ensure annual vision examinations.
- Ensure good nutrition to support strong bones & daily activity. Consider Vitamin D supplementation to achieve the recommended daily allowance set by the Institute of Medicine.<sup>13</sup>
- Conduct home safety assessments and implement needed modifications.<sup>10, 11</sup>

## Fear of Falling

Fear of falling frequently leads to individuals limiting their daily activities resulting in: reduced mobility, loss of physical fitness, and an increased risk of falling.

## Improving Falls Prevention

Falling is a problem in which multiple risk factors interact. Individual fall risk profiles will include different components. Reducing risk and effectively preventing falls requires further research to:

- Accurately and reliably identify individuals at risk of falling;
- Characterize specific fall risk factors;
- Understand which risk reduction and falls prevention strategies are most appropriate for specific individuals and populations;
- Identify and assess the most cost-effective and feasible tools to use in clinical and community settings; and
- Provide the most appropriate risk reduction intervention in the best setting.<sup>13</sup>

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